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10/593,787	07/18/2007	Masahiro Yoshioka	063086	4744

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EXAMINER	
FINEMAN, LEE A	

ART UNIT	PAPER NUMBER
2872	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,787	YOSHIOKA ET AL.	
	Examiner	Art Unit	
	LEE FINEMAN	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *9/22/06* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

This Office Action is in response to an amendment filed 12 March 2009 in which claim 3 was amended. Claims 1-17 are pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9 and 14-17 are rejected under 35 U.S.C. 102(a) as being anticipated by Kamijo et al., EP 1408351 A1 (henceforth Kamijo '351).

Regarding claims 1 and 7, Kamijo '351 discloses a polarizing plate (page 9, section [0068]) comprising: a polarizer (fig. 1) and a protective film laminated on one or both sides of the polarizer with an adhesive layer (page 9, section [0073]), wherein the polarizer comprises a monolayer film (fig. 1) having a structure having a minute domain (3) dispersed in a matrix formed of an optically-transparent water-soluble resin (1) including an iodine based light absorbing material (2), and the adhesive layer is made of an adhesive that contains a resin curable with an active energy beam or an active material (page 9, section [0073], lines 44-45). It is noted that claim 7 includes the limitation wherein the film used as the polarizer is manufactured by stretching, which is considered a product-by-process claim, and thus, this

limitation is not given patentable weight and is rejected for the reasons provided above. In product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 2 and 3, Kamijo '351 further discloses wherein the minute domain of the polarizer is formed of an oriented birefringent material and wherein the birefringent material shows liquid crystalline at least in orientation processing step (page 5, section [0041]).

Regarding claim 4, Kamijo '351 further discloses wherein the minute domain of the polarizer has 0.02 or more of birefringence (page 3, section [0014]).

Regarding claim 5, Kamijo '351 further discloses wherein in a refractive index difference between the birefringent material forming the minute domain and the optically-transparent water-soluble resin of the polarizer in each optical axis direction, a refractive index difference (Δn^1) in direction of axis showing a maximum is 0.03 or more, and a refractive index difference (Δn^2) between the Δn^1 direction and a direction of axes of two directions perpendicular to the Δn^1 direction is 50% or less of the Δn^1 (pages 3-4, sections [0015]-[0026]).

Regarding claim 6, Kamijo '351 further discloses wherein an absorption axis of the iodine based light absorbing material of the polarizer is oriented in the Δn^1 direction (page 3, section [0018]).

Regarding claim 8, Kamijo '351 further discloses wherein the minute domain of the polarizer has a length of 0.05 to 500 μm in the Δn^2 direction (page 4, section [0027]).

Regarding claim 9, Kamijo '351 further discloses 9wherein an iodine based light absorbing material of the polarizer has an absorbing band at least in a band of 400 to 700 nm wavelength range (page 4, section [0028]).

Regarding claim 14, Kamijo '351 further discloses wherein a transmittance to a linearly polarized light in a transmission direction is 80% or more, a haze value is 5% or less, and a haze value to a linearly polarized light in an absorption direction is 30% or more (page 4, sections [0031]-[0032]).

Regarding claim 15-17, Kamijo '351 further discloses wherein the polarizer as set forth above is an optical film and image display (page 13, sections [0078]-[0079]).

3. Claims 1-9 and 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kamijo et al., US 7,289,266 B1 (henceforth Kamijo '226).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1 and 7, Kamijo '226 discloses a polarizing plate (column 11, lines 54-56) comprising: a polarizer (fig. 1) and a protective film laminated on one or both sides of the polarizer with an adhesive layer (column 12, line 59-column 13, line 3), wherein the polarizer comprises a monolayer film (fig. 1) having a structure having a minute domain (3) dispersed in a matrix formed of an optically-transparent water-soluble resin (1) including an iodine based light

absorbing material (2), and the adhesive layer is made of an adhesive that contains a resin curable with an active energy beam or an active material (column 13, line 2). It is noted that claim 7 includes the limitation wherein the film used as the polarizer is manufactured by stretching, which is considered a product-by-process claim, and thus, this limitation is not given patentable weight and is rejected for the reasons provided above. In product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 2 and 3, Kamijo '226 further discloses wherein the minute domain of the polarizer is formed of an oriented birefringent material and wherein the birefringent material shows liquid crystalline at least in orientation processing step (column 6, lines 17-23).

Regarding claim 4, Kamijo '226 further discloses wherein the minute domain of the polarizer has 0.02 or more of birefringence (column 2, lines 57-58).

Regarding claim 5, Kamijo '226 further discloses wherein in a refractive index difference between the birefringent material forming the minute domain and the optically-transparent water-soluble resin of the polarizer in each optical axis direction, a refractive index difference (Δn^1) in direction of axis showing a maximum is 0.03 or more, and a refractive index difference (Δn^2) between the Δn^1 direction and a direction of axes of two directions perpendicular to the Δn^1 direction is 50% or less of the Δn^1 (column 2, lines 63-column 4, line 3).

Regarding claim 6, Kamijo '226 further discloses wherein an absorption axis of the iodine based light absorbing material of the polarizer is oriented in the Δn^1 direction (column 3, lines 24-26).

Regarding claim 8, Kamijo '226 further discloses wherein the minute domain of the polarizer has a length of 0.05 to 500 μm in the Δn^2 direction (column 4, lines 6-7).

Regarding claim 9, Kamijo '226 further discloses 9wherein an iodine based light absorbing material of the polarizer has an absorbing band at least in a band of 400 to 700 nm wavelength range (column 4, lines 16-18).

Regarding claim 14, Kamijo '226 further discloses wherein a transmittance to a linearly polarized light in a transmission direction is 80% or more, a haze value is 5% or less, and a haze value to a linearly polarized light in an absorption direction is 30% or more (column 4, lines 34-67).

Regarding claim 15-17, Kamijo '226 further discloses wherein the polarizer as set forth above is an optical film and image display (column 13, lines 60-65).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamijo '351

Regarding claims 12 and 13, Kamijo '351 further discloses wherein the protective film has a thickness direction retardation Rth = {(nx + ny) / 2 - nz} x d is 30 nm or less, where a direction of a transparent protective film in which an in-plane refractive index within the film surface concerned gives a maximum is defined as X-axis, a direction perpendicular to X-axis is defined as Y-axis, a thickness direction of the film is defined as Z-axis, refractive indices in axial direction are defined as nx, ny, and nz, respectively, and a thickness of the film is defined as d (nm) (page 9, section [0071]) and wherein the protective film comprises at least one selected from a resin composition containing a thermoplastic resin (A) having a substituted and/or non-substituted imide group in a side chain and a thermoplastic resin (B) having substituted and/or non-substituted phenyl group and nitrile group in a side chain (page 9, section [0069]). Kamijo '351discloses the claimed invention except for explicitly stating wherein the protective film has an in-plane retardation Re = (nx - ny) x d is 20 nm or less. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made (nx - ny) x d is 20 nm or less, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering an optimum value or working ranges involves only routine skill in the art. One would have been motivated to have (nx - ny) x d is 20 nm or less for the purpose of providing specific light directing characteristics. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235.

6. Claims 1, 7, 9-11, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moravec et al., US 6,761,452 B2 (henceforth Moravec) in view of Nakahara et al., JP 2002-148436 (henceforth Nakahara).

Regarding claims 1, 7 and 10-11, Moravec discloses a polarizing plate (column 11, lines 54-56) comprising: a polarizer (see at least the abstract), wherein the polarizer comprises a monolayer film (see example 1) having a structure having a minute domain (melanin) dispersed in a matrix formed of an optically-transparent water-soluble resin (polyvinyl alcohol) including an iodine based light absorbing material (see column 6, lines 29-33 and column 1, 23-29). Moravec further discloses that various functional layers and adhesives may be added to the optical film (column 5, line 66-column 6, line 15), but does not explicitly state including a protective film laminated on one or both sides of the polarizer with an adhesive layer, wherein the adhesive layer is made of an adhesive that contains a resin curable with an active energy beam or an active material; for wherein the adhesive is an active energy beam-curable solventless adhesive or a moisture-curable one-component adhesive and wherein the protective film has a bonded surface that has been subjected to at least one treatment selected from corona treatment, plasma treatment, flame treatment, primer coating treatment, and saponification treatment. Nakahara teaches providing a polarizer with protective plates via a moisture-curable one-component adhesive to provide adhesion between a polarizer and a the protective film which has a bonded surface that has been subjected to at least one treatment selected from corona treatment, plasma treatment, flame treatment, primer coating treatment (abstract). It would have been obvious to one of ordinary skill in the art to add the protective plates by adhesive as taught by Nakahara to the polarizer of Moravec to provide better protection to the polarizer. It is noted that claim 7 includes the limitation wherein the film used as the polarizer is manufactured by stretching, which is considered a product-by-process claim, and thus, this limitation is not given patentable weight and is rejected for the reasons provided above. In product-by-process claims,

"once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 9, Moravec further discloses wherein an iodine based light absorbing material of the polarizer has an absorbing band at least in a band of 400 to 700 nm wavelength range (column 2, line 63- column 3, line 1).

Regarding claim 14, Moravec in view of Nakahara as set forth above discloses the claimed invention except wherein a transmittance to a linearly polarized light in a transmission direction is 80% or more, a haze value is 5% or less, and a haze value to a linearly polarized light in an absorption direction is 30% or more. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the transmittance to a linearly polarized light in a transmission direction be 80% or more, the haze value be 5% or less, and the haze value to a linearly polarized light in an absorption direction be 30% or more, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering an optimum value or working ranges involves only routine skill in the art. One would have been motivated to make the transmittance to a linearly polarized light in a transmission direction be 80% or more, the haze value be 5% or less, and the haze value to a linearly polarized light in an absorption direction be 30% or more for the purpose of providing specific optical characteristics for use in a specific device. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235.

Regarding claim 15-17, Moravec further discloses wherein the polarizer as set forth above is an optical film and image display (see column 1, lines 63-64 and column 3, lines 4-7).

7. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamijo '351 in view of Nakahara.

Regarding claims 10 and 11, Kamijo '351 discloses the claimed invention except for wherein the adhesive is an active energy beam-curable solventless adhesive or a moisture-curable one-component adhesive and wherein the protective film has a bonded surface that has been subjected to at least one treatment selected from corona treatment, plasma treatment, flame treatment, primer coating treatment, and saponification treatment. Nakahara teaches a moisture-curable one-component adhesive to provide adhesion between a polarizer and a the protective film which has a bonded surface that has been subjected to at least one treatment selected from corona treatment, plasma treatment, flame treatment, primer coating treatment (abstract). It would have been obvious to one of ordinary skill in the art to replace the adhesive of Kamijo '351 with that of Nakahara to provide excellent adhesion and resistance to moist heat (see Nakahara English translation section [0013]).

Response to Arguments

8. Applicant's arguments filed 12 March 2007 in regards to claims 1-9 and 14-17 have been fully considered but they are not persuasive.

Applicant argues that the examiner has taken the phrase "the adhesive layer is made of an adhesive that contains a resin curable with an active energy beam or an active material" out of

context and when read in view of the complete description does not provide the adhesive as claimed because the protective film is between the polarizer and the adhesive. The examiner respectfully disagrees. The examiner is taking the hard coat to be a protective film and therefore it is laminated to a side of the polarizer via the curable resin adhesive, the protective film and another adhesive. It is noted that the features upon which applicant relies (i.e., the protective film being laminated directly to polarizer by adhesive with no intervening layers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Applicant's arguments and statement of Kamijo '266 being commonly assigned with the instant application, see page 14, filed 12 March 2009, with respect to the rejection of claims 10-13 have been fully considered and are persuasive. The 103 rejection of claims 10-13 has been withdrawn.

10. It is noted by the Examiner that the specification and claim objections and double patenting rejections made in the previous Office Action have been withdrawn due to amendment by the Applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE FINEMAN whose telephone number is (571)272-2313. The examiner can normally be reached on Monday - Friday 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lee Fineman/
Primary Examiner, Art Unit 2872
4 June 2009